

WHAT IS CLAIMED IS:

1. An analytic model preparing apparatus for preparing an analytic model for analysis from a CAD model, wherein said apparatus has the function of searching a joint portion from data of said CAD model and emphatically displaying the joint portion.

2. An analytic model preparing apparatus for preparing an analytic model for analysis from a CAD model, wherein said apparatus has the function of searching a joint portion from data of said CAD model and preparing an analytic model corresponding to the joint portion.

3. A storage medium storing an analytic model preparing program for preparing an analytic model for analysis from a CAD model, wherein said analytic model preparing program provides the function of searching a joint portion from data of said CAD model and delivering a signal for emphatically displaying the joint portion.

4. A storage medium storing an analytic model preparing program for preparing an analytic model for analysis from a CAD model, wherein said analytic model preparing program provides the function of searching a joint portion from data of said CAD model and preparing an analytic model corresponding to the joint portion.

5. A storage apparatus storing an analytic model preparing program for preparing an analytic model for analysis from a CAD model, wherein said analytic model

preparing program provides the function of searching a joint portion from data of said CAD model and delivering a signal for emphatically displaying the joint portion.

6. A storage apparatus storing an analytic model preparing program for preparing an analytic model for analysis from a CAD model, wherein said analytic model preparing program has the function of searching a joint portion from data of said CAD model and preparing an analytic model corresponding to the joint portion.

7. An analytic model preparing apparatus for preparing an analytic model for numerical analysis in respect of a CAD model including a joint means such as welding, rivet, bolt, screw or adhering, comprising:
means for inputting, as the CAD model, profile data and a profile attribute of an object to be analyzed;

means for searching a part of laminate structure from said CAD model to prepare a neutral plane model;

means for extracting a joint target part, a joint position and a joint means from said CAD model;

means for registering said extracted joint target part, joint position and joint means as parts joint data;

means for retrieving a joint model preparing object corresponding to said joint means registered in said parts joint data from a joint model preparing

object database;

means for executing a joint model preparing process registered in said joint model preparing object to prepare a joint model; and

means for synthesizing said joint model and said neutral plane model to prepare an analytic model.

8. An analytic model preparing apparatus according to claim 7, wherein as said joint model preparing object, the joint means, joint model type, joint model attribute and joint model preparing procedure are registered in said joint model preparing object database.

9. An analytic model preparing apparatus according to claim 7, further comprising means for registering said joint target part, joint position and joint means in a three-dimensional CAD model as assembly joint data, and means for registering said joint target part, said joint position and said joint means as parts joint data.

10. An analytic model preparing apparatus according to claim 7, further comprising means for emphatically displaying a joint position identified from said CAD model on an input/output unit.